

On page 2, delete lines 11-13.

On page 2, line 19, replace "traditional" with --conventional--.

On page 2, delete lines 28-29.

On page 3, delete lines 4-6; and insert:

SUMMARY OF THE INVENTION

a2 The present invention provides for replacing

On page 3, line 7, replace "by" with --with--, and replace "thus reduce" with --reducing--.

On page 3, delete lines 18-21.

On page 5, delete lines 5-6.

On page 5, line 7, delete "as".

On page 5, line 8, replace "presented here can" with --may--, and delete "accordingly".

On page 5, line 9, replace "where" with --in which--.

On page 5, delete lines 23-24.

On page 5, line 25, replace "It is obvious that two" with --Two--, and replace "must" with --should--.

On page 6, delete lines 25-30, and insert:

a3 --Any desired test strategies may be applied to this method, but it is advantageous to apply the methods according to the present invention--.

On page 7, line 27, replace "must" with --may--.

On page 7, line 36, before "relevant", insert --entirely--.

On page 8, delete lines 1-2.

On page 8, line 3, replace "German Patent" with --described in German Patent Application No.--.

On page 8, delete lines 21-22.

On page 9, delete lines 7-9, and insert:
--Conventional BIST methods usually perform the--.

On page 9, line 11, delete "with".

On page 9, line 12, delete "that".

On page 9, line 23, replace "where" with --in which--.

On page 10, delete lines 14-15.

On page 10, line 24, after "etc.),", insert --or--.

On page 10, delete lines 30-31.

On page 11, line 1, delete "As".

On page 11, line 2, replace "an expedient, it is proposed" with --It is possible--.

On page 11, line 16, replace "One" with --A--.

On page 11, line 17, replace "must be" with --are--.

On page 11, line 21, delete "therefore".

On page 11, line 24, replace "ErrorCHK. To do so, however" with --ErrorCHK--.

On page 11, line 25, replace "must be" with --being--, and replace "However, this" with --The--.

On page 11, delete lines 29-32, and insert:
--Processors includes a--.

On page 12, line 1, delete "It".

On page 12, delete line 2, and insert:
--A test may be performed during--.

On page 12, delete lines 10-12, and insert:
--The present invention provides for replacing defective--.

On page 12, line 13, replace "units in the" with --units, for example,--.

On page 12, line 14, delete "present publication", and replace "can represent" with --may be--.

On page 12, line 15, replace "by" with --with--, and replace "At the same time, the" with --The--.

On page 12, line 16, replace "relates to" with --provides--.

On page 12, line 18, replace "This also" with --The present invention--.

On page 12, line 20, replace "especially important" with --advantageous--.

On page 12, line 22, replace "military" with --military, for example--.

On page 12, delete lines 24-37, and insert:

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 illustrates a circuit arrangement according to the present invention.

Figure 2 illustrates elements of the circuit arrangement in a first state according to the present invention.

Figure 3 illustrates elements of the circuit arrangement in a second state according to the present invention.

Figure 4 illustrates elements of the circuit arrangement in a third state according to the present invention.

Figure 5 illustrates elements of the circuit arrangement in a fourth state according to the present invention.

Figure 6 illustrates another circuit arrangement according to the present invention.

Figure 7a illustrates a first test algorithm according to the present invention.

Figure 7b illustrates a second test algorithm according to the present invention.

Figure 8a illustrates a first configuration that tests a chip according to the present invention.

Figure 8b illustrates a second configuration that tests the chip according to the present invention.

Figure 8c illustrates a third configuration that tests the chip according to the present invention.

invention.

Figure 9 illustrates a chip-internal memory with a BIST function according to the present invention.

Figure 10 illustrates a fault-tolerant processor according to the present invention.

Figure 11 shows a flowchart illustrating a self-test process according to the present invention.

Figure 12a shows a flowchart illustrating the generation of new multiplexer states using a counter according to the present invention.

Figure 12b shows a flowchart illustrating the generation of new multiplexer states using a look-up table according to the present invention.

Figure 13 shows a flowchart illustrating a self-test process during an IDLE cycle according to the present invention.

Figure 14 illustrates a representation in which the self-test process is integrated into an application program according to the present invention.

Figure 15 illustrates a look-up table according to the present invention.

Figure 16 illustrates a fault-tolerant bus system according to the present invention.

Figure 17 illustrates saving registers in a chip-internal memory before executing a test algorithm according to the present invention.

Figure 18 illustrates saving registers in an external memory before executing the test algorithm according to the present invention.

Figure 19 illustrates a test register implementation before executing the test algorithm

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cont.

ay
concl according to the present invention

On page 13, delete lines 1-21.

On page 13, delete lines 23-24, and insert:

--DETAILED DESCRIPTION--.

On page 13, line 32, replace "are" with --may be--.

On page 13, line 33, delete "an are not absolutely necessary".

On page 13, line 34, replace "composed of" with --carrying--.

On page 14, line 1, replace "are composed of" with --carry--.

On page 14, line 24, replace "according to" with --as described in--.

On page 14, line 25, after "Patent", insert --Application No.--.

On page 16, line 15, delete "it is important for".

On page 16, line 16, replace "to be" with --are--.

On page 17, line 11, replace "according to German Patent" with --as described

a5 in German Patent Application No.--.

On page 17, delete line 13, and insert:

--method according to the present invention. A conventional memory are (0901)--.

On page 17, line 14, delete "to the related art".

On page 17, line 15, replace "is usually" with --may be--.

On page 17, line 19, replace "This" with --It--.

On page 17, line 30, replace "the" with --an--.

On page 17, delete line 31, and insert:
--correction implemented. The--.

NE On page 18, line 15, replace "described here" with --according to the present invention--.

On page 18, line 19, replace "Thus according" with --According--, and replace "described here" with --according to the present invention--.

On page 19, line 6, replace "proposed" with --provided--.

On page 19, line 8, replace "where" with --in which--.

On page 21, line 1, replace "is performed according to" with --may be performed, for example, as illustrated in--.

On page 21, line 8, delete "here", and replace "ROM" with --ROM, for example--.

On page 22, line 23, replace "proposed" with --provided--.

On page 24, line 8, before "196", insert --No--.

On page 24, line 9, before "196", insert --No--.

On page 24, line 25, replace "must be" with --are--.

On page 26, delete line 1, and insert:
--What Is Claimed Is--.